ATTACHMENT B

COVER PAGE FOR MASTER'S PROJECT

Profitability and contribution to alternate travel modes in new United States value pricing projects

by

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A Master's Project submitted to the faculty
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Regional Planning
in the Department of City and Regional Planning.

Chapel Hill

2010

Approved by:

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ADVISOR READER (optional)

Introduction

This paper examines profitability of value pricing schemes in the United States. First it introduces road pricing in general and common as-applied scenarios. Second, it provides background on welfare impacts of road pricing and the economic impacts of profitability in road pricing. Third, it examines facilities in the United States that have been developed recently, examining their operations, revenues, expenses, and profitability. Finally, it summarizes and compares these facilities and their profitability outcomes in light of the need for a socially-positive welfare outcome for successful equitable implementation of road pricing schemes.

Funding road transportation has begun a transition from large-scale user fees on gasoline to a smaller-scale set of fees related to individual facilities. Charging users of individual facilities has common in major urbanized areas around the world, with prominent schemes in Stockholm, London, Singapore, and other cities. In the United States, a reluctance on the part of government entities to raise taxes on motor fuels has created a need for secondary funding sources. US DOT's Federal Highway Administration has funded studies, demonstration programs, and implementation programs in the past 10 years with the intent of creating viable directly-priced facilities.

Road pricing has gained in popularity in recent years with the introduction of automatic toll collection systems that remove the labor costs from direct toll collection. They also allow vehicles to traverse a toll booth much faster than toll collection involving an individual performing the toll collection. Electronic toll collection also allows for much easier modification of toll amounts, allowing dynamic toll pricing in response to stimuli. Congestion pricing arose out of these developments, which allows a facility administrator to vary the price of usage to arrive at a target volume or revenue for the time period under observation. Congestion charging converts users' implicit value of time in their decisions to drive on congested facilities to an explicit one that attempts to allow users to spend less time (but more money) on their trips through congested areas.

In the United States, congestion charging has been most commonly implemented as *value pricing*, a subset of variable tolling that provides parallel facilities with some of the lanes priced and some unpriced. This paradigm arose because of the preexisting high-occupancy vehicle (HOV) lanes on many highways in the United States, lanes with restrictions on usage based on vehicle occupancy, usually either 2+ or 3+ persons have to be in a vehicle to use the lane. After these lanes were built, much of the time they were underused, encouraging researchers to explore new policies that would improve uptake of these lanes (Stockton & Daniels, 2000). Out of this research came the addition of a priced capability to add users to these lanes, creating High-Occupancy Toll (HOT) lanes. Most of the projects studied in this research are HOT conversion projects.

Out of these trends and efforts several projects have arisen. A snapshot of projects that have been open long enough to evaluate will be examined here for their results in terms of profitability and welfare for society. Projects range from the oldest example in the United States, SR-91 in Orange County, California, to one of the newest, the 95 Express lanes in Miami, Florida. Each project will be examined for comparison purposes with regard to operation, costs,

and revenues that result from the projects and their stated and actual uses. Before this analysis, though, a background on the justification of direct road pricing schemes is offered, with particular emphasis on the welfare analysis that has been discussed in road pricing and provides theoretical justification for these new pricing regimes.

Value pricing as implemented in the United States generally involves a 2-lane HOT facility with limited ingress and egress over a short span of the most congested portions of a major highway in a metropolitan area. Tolls are collected electronically (no option for toll booths) and paid for using prepaid credit in an account linked to a transponder mounted on the windshield in the vehicle. Enforcement mechanisms generally involve highway patrol and, in some cases, electronic identification of vehicle occupancy and identification using cameras that determine front passenger seat occupancy and then, if necessary, take a photograph of the vehicle's license plate to send a notice and fine to the vehicle owner.

Current literature on road pricing generally revolves around implementation issues (prices to charge, enforcement and user awareness, technical issues surrounding transponders and facility routing, etc.) and the theoretical basis for road pricing in economic theory (Verhoef, 2008). Much of the analysis conducted on existing facilities has focused on operations and improvement, such as surveying users for their attitudes about the facilities and ways to improve customer service processes (Humphrey Institute of Public Affairs, 2006). Other research has looked at equity in road pricing: the ability to pay for less time spent in congested travel is intuitively for those with more funds than time, that is, those for whose time is worth more to them and they can afford to pay for the conversion, thus giving these facilities the derisive name "Lexus Lanes" (Hymon, 2007). Equity in road pricing has been studied extensively, with the conclusion "that the perception of unfairness may be exaggerated...the perception that congestion pricing is an inequitable way of responding to the problem of traffic congestion does not appear to be borne out by experience" (Federal Highway Administration, 2009). Research has not tended toward evaluation of projects based on their outcomes, such as profitability and using those profits for other projects. In the next section background for the necessary profitability of these systems will become clear.

Road Pricing and Welfare

Theoretical justification for road pricing begins with the limited resources that create congestion. Convergence of route, place, and time create desirable locations for travel patterns that fill up road networks (Downs, 2004). Some of this is caused by geography: in Southern California, SR-91 is the primary route between Orange and Riverside Counties, and mountain ranges mean that a parallel route is impractical. Other areas have simple land use reasons for congestion, such as the sprawl of Atlanta, with no natural barriers to land consumption. Congested facilities also experience a decline in volume as compared to facilities operating at free-flow speed. Average maximum volume for a lane of highway on flat terrain is 2,200 passenger cars/lane/hour at 60 miles per hour, but a greater amount of users attempting to enter the highway creates break down conditions that allow fewer vehicles through the highway (Transportation Research Board, 2000).

Efficient economic outcomes for congested facilities would theoretically begin with dynamically-priced distance-based charges. Depending on the actual facility and its level of crowding, each additional vehicle desiring to travel on a near-capacity facility would be charged progressively more until some potential users decided to use a different route, which would keep the facility from becoming overloaded and breaking down. This might mean that speed on the facility would be maximized; depending on the amount of revenue that would be generated, though, this could could also mean that profits generated would go into some socially-efficient use that would mitigate the amount of revenue generated by the scheme. Simply speaking, this is the first-best pricing scheme, that every mile is charged for at dynamic marginal rates that maximize the road facility's capacity, keeping each link as full as possible but not over-congested. First-best pricing also assumes that the entire network is marginally priced. The first-best model is not practical in any developed area due to the resistance of the public to such a scheme, the non-trivial technical difficulties to developing such a system, and the need for a full-scale equilibrium model; that is, modeling the outcomes for the whole of society is needed to achieve pricing guidance for a first-best pricing system. (Yang & Huang, 2005). In terms of societal welfare, this model does maximize everyone's willingness to pay for a road network, so it is effective at creating more economic welfare but also does require that revenues generated end up in some positive activity such as alternative transportation modes.

Since first-best models for road pricing are complex and impractical for implementation, second-best pricing models involve some aspects of the first-best model but do not implement them fully. They might be link-limited (on one or a few facilities), price-limited (a fixed toll for use of a bottleneck, such as a bridge), spatially-limited (charges to use a specific geographic area), or delay-limited (only charged when volume exceeds breakdown conditions) (Yang & Huang, 2005, p. 81). These schemes typically use limited application on significant portions of a road network to maximize effectiveness. They use partial-equilibrium modeling to determine proper pricing on an individual link or links on a network. Partial-equilibrium modeling simplifies analysis to allow pre-operation estimates of usage, pricing, and revenue. Most priced facilities, and the facilities in discussion here, fall under this category of models.

In particular, the application of a second-best pricing model to a facility with two portions, one price and one unpriced, is the primary application of variable road pricing in the United States. Facilities consist of two lanes of variably-priced, limited-entry and exit roadway in the median of an existing facility. Since these links are exactly parallel to unpriced facilities modeling behavior on the network becomes much simpler.

Within these second-best pricing schemes the heterogeneity of users and the dissimilarity of network entry, exit, and design create equity impacts that affect different facility users in different ways. In particular, it can be shown that users with different values of time are affected differently by a direct charge for the use of a facility. Heterogenous time values creates heterogenous disutilities for travel on the facility. A user's value of time means that as the time cost and monetary cost of facility usage change a user's overall disutility for the facility can change. Users of a tolled facility with a lower value of time tend to have a higher disutility for travel on priced facilities; that is, "lower-income users are more likely to be made worse off than

before" (Yang & Huang, 2005, p. 208). Analysis of users' heterogenous values of time have allowed the creation of terms like "Lexus Lanes" to describe value priced facilities.

In order to mitigate the impact of these disutilities on users new projects need to program for the revenue from congestion pricing to be redistributed to another portion of society that could make use of the welfare increase. On a practical level, some of the facilities advertise their contributions to high-quality bus service in the same corridor, while others do little to inform the public of their efforts to transfer funds away from direct users to provide alternatives to the value priced facility. On a theoretical level, there are many options for revenue redistribution to other modes. Revenue redistribution, however, is important to the welfare situation for these facilities, as Parry (2001) and Small (1992) emphasize as secondary points to their discussion of possible outlets for congestion pricing revenues. For congestion pricing to result in significant disutility reductions in a local environment, facilities need to be profitable and transfer those profits to a project or program that both the public identifies as acceptable and creates direct welfare gains to society.

Current Project Description

In this analysis, projects to be covered in greater or less detail include:

Table 1: Facilities Analyzed

Facility Name	Parallel Facility	Administrative Entity	Location
91 Express Lanes	SR-91	Orange County Transportation Authority	Orange County, California
FasTrak Express Lanes	I-15	San Diego Association of Governments	San Diego County, California
I-25 HOV Express Lanes	I-25	Colorado High Performance Transportation Enterprise	Denver, Colorado
MnPass	I-394	Minnesota Department of Transportation	Minneapolis, Minnesota
95 Express	I-95	Florida Department of Transportation	Miami, Florida

These projects are of varying age, operational status and length, with the SR-91 being the oldest and the 95 Express project being the newest. MnPass was recently expanded to another facility in Minneapolis (I-35W), but the relative newness means that analysis is not appropriate at this time. The FasTrak program has future plans to expand in length along I-15 and also to other facilities around the San Diego metropolitan area.

All projects include certain similarities that make some simplifications and comparisons practical. Adding another source of explicit revenue generation to the transportation system is generally something that most people oppose, and public involvement strategies to gain the general public's approval for these projects has been controversial, in some cases taking many years (Buckeye & Munnich, 2006). Projects are generally marketed extensively to provide

explanations to users of the facilities as to what they need to use the facility (a transponder) and where they can enter/exit the facility. Tolls are generally only higher than $1 during peak times, with the 91 Express Lanes peak toll of $9.90 from 4 PM to 5 PM on Thursday afternoon being the highest actual toll a user might have to pay to use one of these facilities. Significant differences exist in number of users and facility design with regard to entry/egress. Some of the projects operate as independent entities with issued financial statements and comprehensive details of operations; others are sub-groups within state Departments of Transportation, which makes some information on operations more opaque.

91 Express Lanes Description

The 91 Express Lanes are the oldest value-priced facility in the United States and are also unique in their organizational history as a long-term lease to a private enterprise to attempt to lower costs on this new expansion. Orange County Transportation encountered problems with expanding a parallel facility due to contractual obligations regarding demand on the facility (expanding a parallel facility might have resulted in less demand for the 91 Express Lanes) and were able to get citizens to issue bonds to buy out the private enterprise. The facility's revenues are now mostly used to pay for the bonds issued to purchase the facility. Design of the facility is two lanes in each direction with no ingress or egress except at the end points (near SR-55 in Orange County and the Riverside County line). Toll schedules are set and revised every 6 months, not priced in a truly dynamic fashion. Tolls are designed to maximize traffic flow in the facility. The facility is generally regarded as a success and has been a laboratory for equity issues in value pricing. Early surveys of users (to determine if they were all 'Lexus'-type users) were important in justifying the facilities despite their equity impacts on persons with low values of time (e.g., lower-income users). Revenues from the facility are used primarily to cover debt service. As of 2008, the facility had bond and other significant liabilities of $206.2 million, with no expenses related to revenue transfers to other areas of transportation or welfare gains. Facility usage has been consistently high, although variations in economic conditions have contributed to less revenue than previous years.

Table 2: 91 Express Lanes Revenues and Users (91 Express Lanes)

Fiscal Year	Actual Average Daily Transactions	Projected Average Daily Transactions	Percent of Projections	Actual Toll Revenues	Projected Toll Revenues	Percent of Projections
2009	32,978	32,700	101%	$36,048,000.00	$35,500,000.	102%
2008	36,824	40,400	91%	$39,636,000.00	$45,000,000.	88%
2007	40,110	35,400	113%	$40,574,000.00	$34,700,000.	117%
2006	38,860	33,700	115%	$37,510,000.00	$31,800,000.	118%
2005	34,900	32,100	109%	$32,518,000.00	$29,100,000.	112%

Fiscal Year	Actual Average Daily Transactions	Projected Average Daily Transactions	Percent of Projections	Actual Toll Revenues	Projected Toll Revenues	Percent of Projections
2004	30,600	30,300	101%	$26,972,000.00	$26,400,000.	102%

For fiscal 2008 (July 2007-June 2008), the 91 Express Lanes took in $46,236,247 in revenue (includes fees and fines in addition to actual toll revenue) and spent $23,396,655 on operating expenses associated with administration of the facility, including operating the toll scheme and facility maintenance, as well as facility depreciation. The largest item after depreciation was contracted services for toll operations at $5.9 million. This leads to average revenue per transaction of $2.86 and an average cost per transaction of $1.67, or over the 10-mile length of the facility, $0.17 per vehicle-mile traveled. Revenue:costs ratio is thus 1.9 including depreciation of the facility.

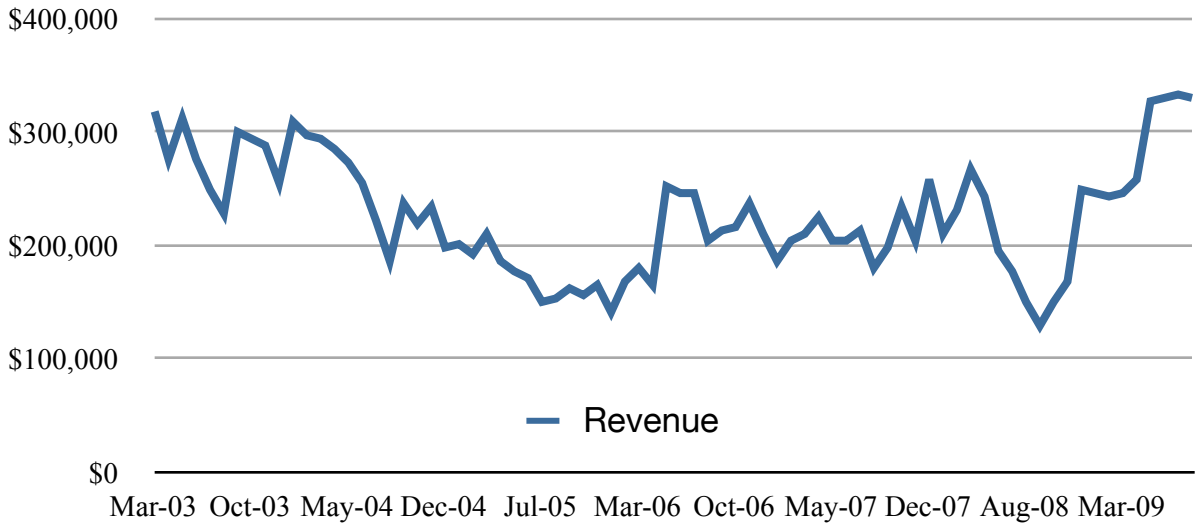
FasTrak Express Lanes Description

FasTrak Express Lanes in San Diego County were begun as a specific HOT conversion project in 1996 (San Diego Association of Governments, 2010b). It has always been public (as opposed to SR-91). The project has evolved over time and never been judged “complete”, such that the current project scope involves more facility expansion as well as eventual expansion to other corridors in the greater San Diego area. The facility uses 16 miles of I-15 north of San Diego with multiple entry/exit points along its length. The southern 8 miles are 2 reversible lanes with limited hours, while the northern 8 miles are complete with 2 lanes of travel in each direction. Tolling recently changed to a distance-based charge (depending on entry/exit point) that also varies based on congestion level. User knowledge of tolls is incomplete if they do not exit the facility at a location listed on the overhead message board indicating their toll. Scale of participation in FasTrak is much lower than SR-91, as is revenue, while facilities are longer and more elaborate.

Table 3: FasTrak Revenues and Users (San Diego Association of Governments, 2010a)

Year	Fastrak Daily Users	Revenue
2004	5,104	$3,009,000
2005	5,023	$2,064,000
2006	4,929	$2,523,000
2007	4,869	$2,544,000
2008	4,785	$2,448,000
2009	4,208	$3,516,000

Figure 1: FasTrak Revenues (San Diego Association of Governments, 2010a)



FasTrak's capital funding has mostly come from local direct sources, with San Diego's local transportation sales tax, *TransNet*, funding much of the capital cost, projected to be over $1 billion. While revenues for SR-91 seemed to follow cyclical economic trends while still remaining positive, monthly revenue totals for FasTrak show a much less clear trend. Project operating costs budgeted for 2010 are $3,975,334, and for 2009 were $3,082,329 (San Diego Association of Governments, 2009, 2010b). Most of these figures are for contracted services for operations ($2.6 million in 2010, $2.0 million in 2009). Cost figures do not include long-term maintenance or depreciation of facilities. Reported toll revenues at $3,009,000 are approximately in line with budgeted costs. Surplus funding is indicated as transferred to transit programs, $597,000 in 2009 and $1.0 million in 2010. Not counting transfers to transit programs, in 2009 the program had a revenue:cost ratio of 1.21.

I-25 HOV Express Lanes

The I-25 HOV Express Lanes are operated by the Colorado High Performance Transportation Enterprise entity of the Colorado Department of Transportation; the facility opened in 2006. The facility consists of two reversible lanes in the median of I-25, operating southbound in the morning and northbound in the afternoon. Tolls range from a low of $.50 to as high as $3.50 or more and are designed to maximize traffic volume on the facility. Facility operations began in 2006 and capital costs were funded from general highway revenues. Revenues are to be used solely on operations and improvement of the I-25 Express Lanes.

Table 4: I-25 Express Lanes Revenue and Users (Colorado Department of Transportation, 2009)

Fiscal Year	Average Daily Users	Revenue
2007	10,467	$1,570,500
2008	12,111	$2,319,600

Fiscal Year	Average Daily Users	Revenue
2009	11,157	$2,150,300

Note: Revenue reported for fiscal year (July-June)

Revenues in the first year shown were significantly affected by the opening of the facility, that is, the first months of operation were significant outliers in terms of users and revenue. Over the course of the facility's history, revenue peaked in late 2007-early 2008 as with the short-term history of similar facilities. Expenses in fiscal 2009 totaled $1.46 million, which were evenly distributed among operations costs (support and maintenance) and repayment of debt issued to support startup costs until the facility is self-sufficient. Toll collection costs were $376,604 *(Colorado High Performance Trasnportation Enterprise, 2009)*. Fiscal 2009 revenue:cost ratio was 1.38.

MnPass

The MnPass program is administered by Minnesota Department of Transportation and operates as an integrated entity within the DOT without a separate organizational or reporting structure. The design of the facility includes 1-2 reversible lanes open during peak hours and open to any traffic on weekends and overnight hours. The program began in 2005 on I-394 and has recently opened on I-35W. Much of the system's emphasis has been on marketing and public relations due to high levels of opposition to the program (Buckeye & Munnich, 2006). There is little public indication as to where profits might go if they were to occur.

Table 5: Mn Pass Revenue and Users (Buckeye, 2007)

Year	Average Daily Users	Revenue
2006	2,320	$738,000
2007	2,740	$1,255,000

Note: Revenue reported for fiscal year (July-June)

The rise in revenue was somewhat expected because the early portion of fiscal 2006 was just after the facility opened, and facilities have typically had more users after commuters have become used to seeing the facility and deciding if the monetary cost is worthwhile. Cost data were limited in availability due to the organizational structure of the MnPass program. Other states and programs typically place their organizations outside the regular departmental structure of a large organization, but this program rests within that structure and so the costs are more difficult to estimate. If one were to this program to Colorado's I-25 HOV Express Lanes operating costs, then the $1.255 million that the program generated in 2007 would be just enough to cover these direct operating costs ($1.15 million in Colorado). The MnPass program would not be able to cover capital costs associated with implementation without significant increases in usage. Revenue to cost ratio estimate would be 1.09.

95 Express

Miami's 95 Express program is the newest value priced facility under study here. The lanes opened in December 2008. The facility consists of 2 lanes in opposing directions in the median of I-95. The project is opening in phases, with 6.2 miles of the northbound portion completed at opening, and the matching southbound portion opened in January 2010. The project was accomplished through an Urban Partnership Agreement between the Florida Department of Transportation, the local transit agencies in Miami and Broward County, and associated other agencies to coordinate the implementation of a strategy to increase mobility on I-95 with a HOT lane conversion and increased transit service in the corridor. Capital costs were paid for by Florida Department of Transportation funding (state and federal fuel taxes). Tolls ranged from a low of $0.25 to a high of $5.00.

Table 6: 95 Express Revenue and Users (Florida Department of Transportation District 6, 2010)

Month	Average Daily Users	Revenue
Dec-08	19,700	$246,000
Jan-09	21,600	$383,000
Feb-09	22,800	$393,000
Mar-09	24,100	$481,000
Apr-09	24,000	$424,000
May-09	23,500	$438,000
Jun-09	23,100	$404,000
Jul-09	22,900	$400,000
Aug-09	23,000	$371,000
Sep-09	22,800	$396,000
Oct-09	23,700	$420,000
Nov-09	23,300	$425,000
Dec-09	23,200	$472,000
Jan-10	48,735	$740,048

The data above show that users on the 95 Express system are higher than any other system. The January 2010 numbers also show a significant increase because the southbound lanes opened on January 15. Future numbers that include a whole month would likely show another increase in users Revenue in the first 12 months was $4.78 million, the highest of any facility examined here except SR-91. A simple cost figure for the first 7 months of operation was $3.25 million,

significantly higher than Colorado's program, but comparable to FasTrak and lower than SR-91. While these costs do mean that the projects operating expenses were more than their revenues, the overall magnitude of income and the expansion of the project should allow for profitability in the future. Project revenues have no specific outcome source, although revenues may end up in maintenance funds for the corridor. Revenue:cost ratio for the first 7 months of operation was 0.852.

Project Comparison

The projects described above each have strengths and weaknesses in their implementation and outcome measures. Significantly, none of the projects except for FasTrak have an explicit mandate to transfer profits (assuming that facilities are profitable) to relieve some local disutility, such as improving transit service. All but SR-91's capital costs were paid for out of more general funding measures which means that some other projects were not and are not being funded to allow these projects to happen. While time series gaps mean that direct comparisons of yearly revenues are difficult, averaging individual months many allow more concrete analysis.

Table 7: Month of July Users and Revenue in Systems Studied

Facility (n=number of months average)	Average Daily Users	Revenue
91 Express Lanes (n=7)	1,010,684	$2,616,631
FasTrak Express Lanes (n=6)	4,037	$192,429
I-25 HOV Express Lanes (n=3)	11,325	$144,150
MnPass (n=2)	2,030	$45,704
95 Express (n=1)	22,900	$400,000

Considering that operational features of these systems are not very dissimilar from each other, the differences among the systems studied seem quite different. While parts of some of these systems are reversible or one lane only, this would presumably lead to perhaps 50% less traffic from one system to another. In this case the difference between the largest system and the smallest system is about 500%. One way to correct these numbers is to examine the potential user base of the facility by looking at both the total number of vehicles that use the facility and the degree of crowding on the facility. These numbers are reported below:

Table 8: Volume and Congestion on Facilities Studied

Facility	AADT	LOS
91 Express Lanes	278000	F
FasTrak Express Lanes	224000	E

Facility	AADT	LOS
I-25 HOV Express Lanes	207000	E
MnPass	148000	B
95 Express	193000	D

Using the figures from Table 8, a correlation can be drawn between the revenue figures for each facility and the amount of traffic and its relative congestion level. The level of service (LOS) on these facilities is simply an estimate based on peak 15-minute vehicle density drawn from given figures in the *Highway Capacity Manual (2000)*, so some of the letters could be less accurate than others. Most of these LOS figures used given stanadards for K30 (30th most used hour of traffic on the facility and average design capacity for urban freeways, average value of 0.091) and D (the directional split, average value of 0.6 for the peak direction on urban freeways) from the *Highway Capacity Manual*, but the Florida DOT had facility-specific numbers for K30 and D, so standard values were not used there. In general, Minnesota's facility has significantly fewer potential customers who experience less congestion than any of the other facilities.

Facility Evaluation of Welfare Effects

The primary aim of this discussion is to examine as-implemented facilities in the United States for their profitability and thus their impact on welfare in the local economies that the facilities were designed to improve. All of the facilities except for 95 Express were at least marginally profitable based on their operating expenses. None of the facilities, however, had been able to pay for their capital costs, although SR-91's revenues are being used explicitly to repay bonds issued to purchase the facility from its private lessee. Profitability has to be judged first in terms of those capital costs. Since four of the facilities' capital costs came from more general funding sources such as transportation sales taxes and highway revenues, is the opportunity cost of expanding these facilities in this way the most efficient use of these funds, or might there be a better bottleneck or capacity expansion in another part of the local area under study? Some of these areas might have had a busier facility to put the first HOT conversion on as well, although the 95 Express lanes seem to have gone onto the most-traveled road in that metropolitan area, some of the other areas, particularly Minnesota's MnPass program, might have encountered more success if there were a higher-trafficked facility to use. Comparing capital costs to international pricing schemes supports the trend that even the most heavily-used facilities have much of their revenue tied up in repaying capital costs associated with developing a new project. London's cordon charging scheme has generated significant amounts of revenue (almost $1.5 billion from inception in 2002 to 2007) but has net profit after capital costs of $15 million over that time period, numbers significantly better than the schemes outlined here, but nevertheless not a significant generator of new funds for other projects, although the welfare effects of the project have generally been calculated as positive (Mahon & Sloan, p. 20; Santos & Fraser, 2005).

Table 10: Facility Profit and Revenue Goals

Facility	Operating Margin (last year reported)	Operating Profit	Goal for Profits
91 Express Lanes	90% (FY08)	$22,839,592	Repay capital costs
FasTrak Express Lanes	21% (FY09)	$597,000	Transfer to transit in corridor
I-25 HOV Express Lanes	38% (FY09)	$591,399	Maintain facility
MnPass	9% (est.)	$105,000	Return to general transportation funding
95 Express	(14.8%) (Dec08-Jun09)	-$481,000	Return to general transportation funding

Maintenance and depreciation also play a role in costs for these facilities. The largest line item in operating expenses for SR-91 is the depreciation associated with the aging of the facility, while none of the other facility costs take this figure into account, eventually requiring even more general transportation funds to repair aging infrastructure. In terms of operating expenses and revenues, the amount of money generated in value pricing does not seem to have a great enough magnitude to replace or create significant new opportunities in transportation alternatives near the corridor expanded. Even though "the economic theory behind congestion pricing relies on using the revenues to help compensate highway users" only San Diego's FasTrak program has an explicit policy in place to transfer profits to transit service in the corridor (Small, 1992, p. 359). The relationship between transit and highway use in Colorado's I-25 HOV Express Lanes is even built on checks and balances - a rate increase on the express bus service that serves the I-25 corridor required an increase in the peak toll on the express lanes that the buses use (the fare and peak toll both rose from $3.25 to $3.50, not due to the amount of congestion on the facility). Facility profitability has not been included in much of the actual design of current value priced facilities in the United States, which has led to situations where the current implementation probably was not the most efficient use of the capital involved in the construction of the value priced facility.

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